

Clark County

Phase 1 Municipal Stormwater Permit

*National Pollutant Discharge Elimination System & State Waste
Discharge General Permit*

2013-2018

Municipal Code and Stormwater Manual Update Project

Updated 5.14.14



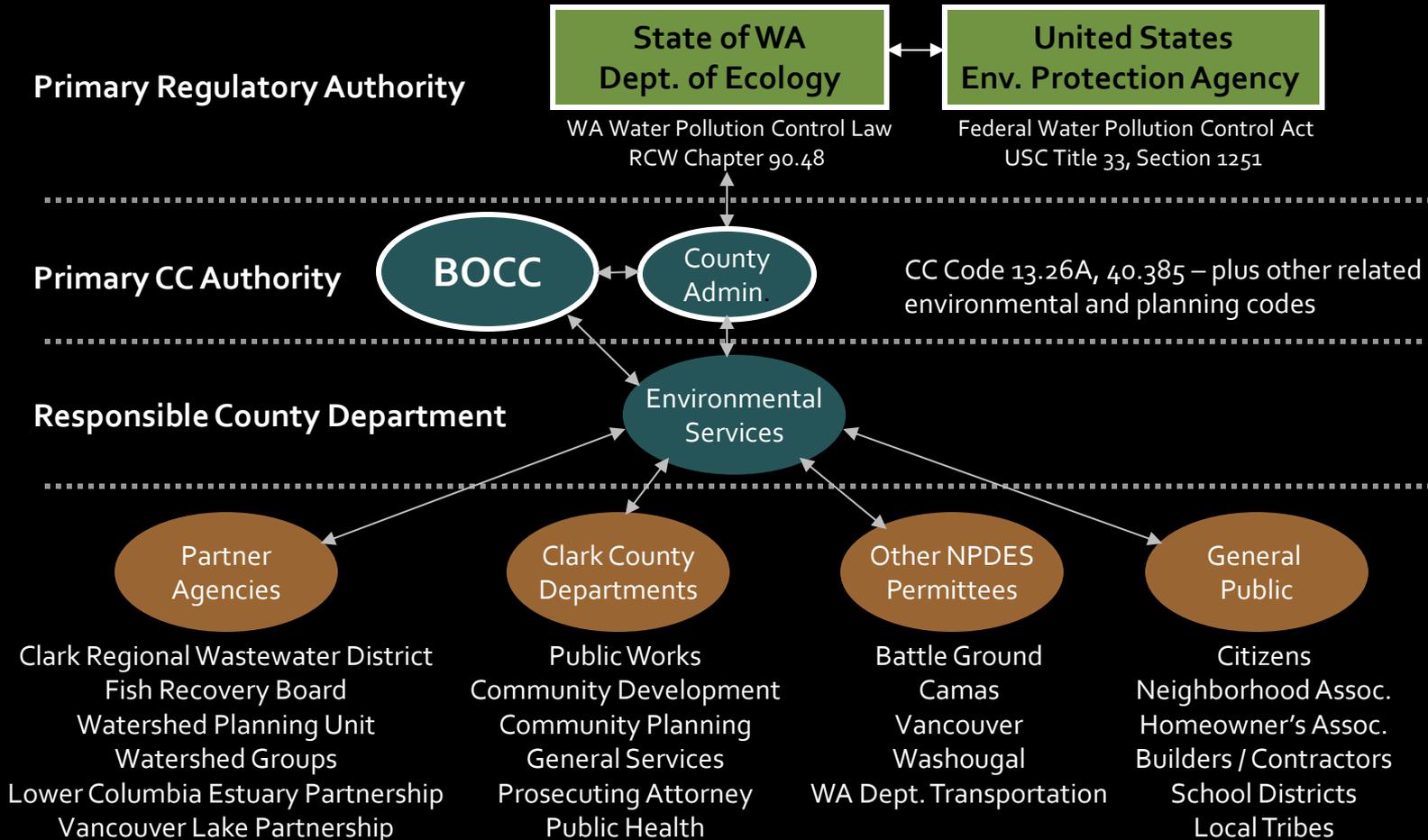
*Long Lake, Ridgefield
Photo: Gary Davenport*

Goal of today's work session:

- **Review stormwater code and manual background**
(how we got here)
- **Schedule**
- **Status of the current Drafts** (“Final Draft” in production)
- **Summary of changes to code and manual**
- **Public outreach summary** (to date)
- **What we request from this session?**
Authority to submit Draft code/manual to Ecology

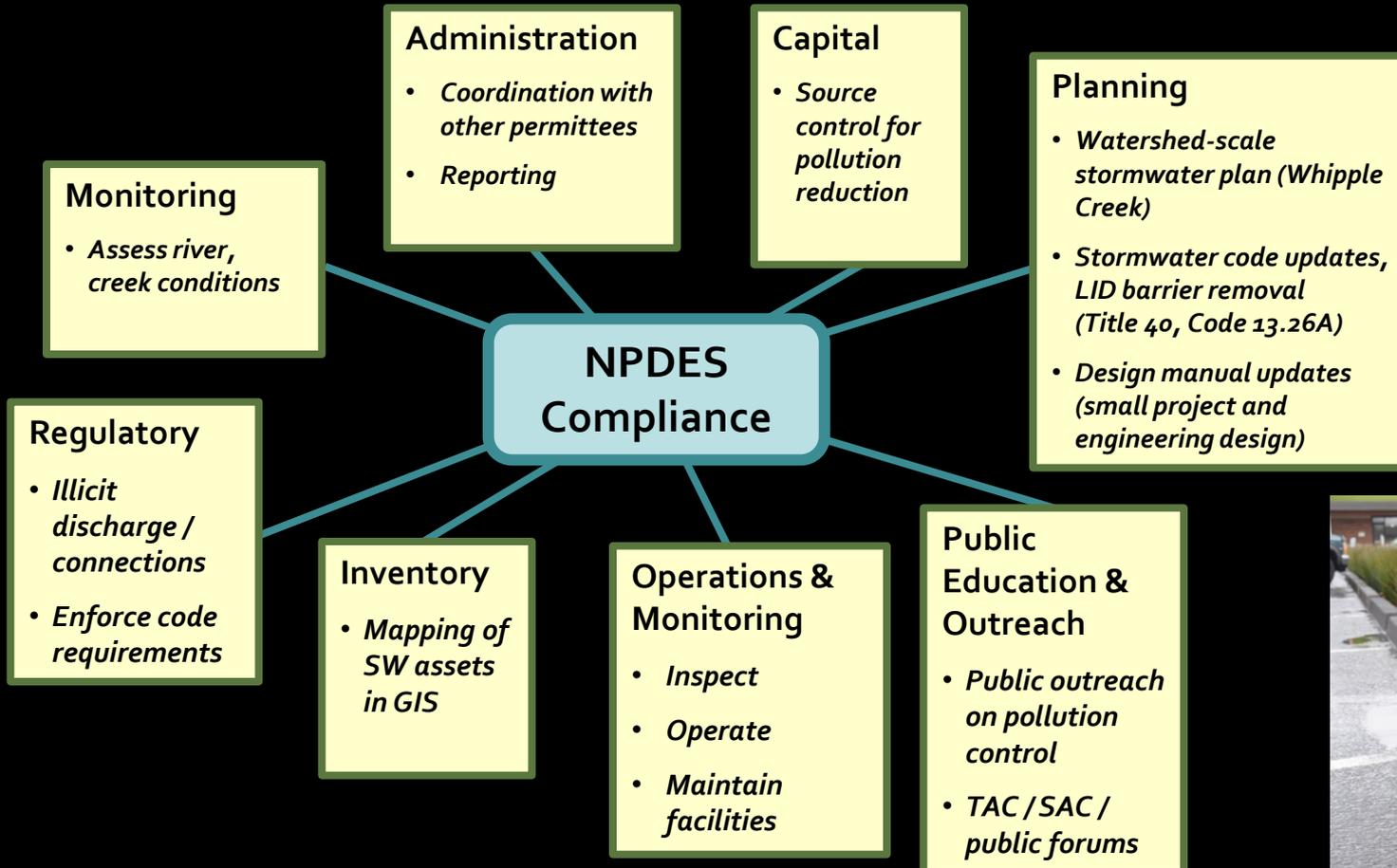


Who is involved in coordination of the Clark County NPDES permit?



- New permit effective August 1, 2013
- New code and design manual go into effect July 1, 2015

What are the changes as a result of the new permit? We will continue work in all sections with emphasis on.....



New Seasons
164th Avenue, Vancouver
Rain Gardens and Rooftop plantings



Updating our stormwater rules

Municipal Code & Stormwater Manual

VISION

Clark County's stormwater runoff is managed to protect the vitality of our community's waterways including our groundwater, rivers, and lakes while supporting an economically vibrant and livable community.

MISSION

To create stormwater management regulations that comply with state and federal regulations while being flexible and tailored to multiple project types, including making *Low Impact Development* (LID) the approach for stormwater management in site development.



Updating our stormwater rules

GOALS

- **Adopt regulations that comply with state and federal water pollution laws** in reducing polluted storm runoff
- **Meet NPDES permit deadlines** to minimize exposure for the county to regulatory and legal challenges
- **Develop an integrated set of development codes** that protect surface and groundwater from stormwater runoff, including the broad use of techniques that utilize low impact development (LID) practices
- **Tailor LID feasibility requirements** to local conditions ensuring projects are effective and safe, as well as identifying flexible alternatives for implementation



Updating our stormwater rules

GOALS - continued

- **Create a single Stormwater Manual** for development projects that require engineering , including county roads
- **Create a clear and concise 'Small Project' manual for residential building projects** using a minimal amount of text and well-designed illustrations (ON HOLD pending funding)
- **Revise application and review processes to be streamlined,** articulate, effective and supported by county staff.
- **Engage internal and external stakeholders in the update process** so that the resulting code is understandable and applicable to development projects
- **Provide sufficient training and education for staff and the public** to understand how to implement new code requirements

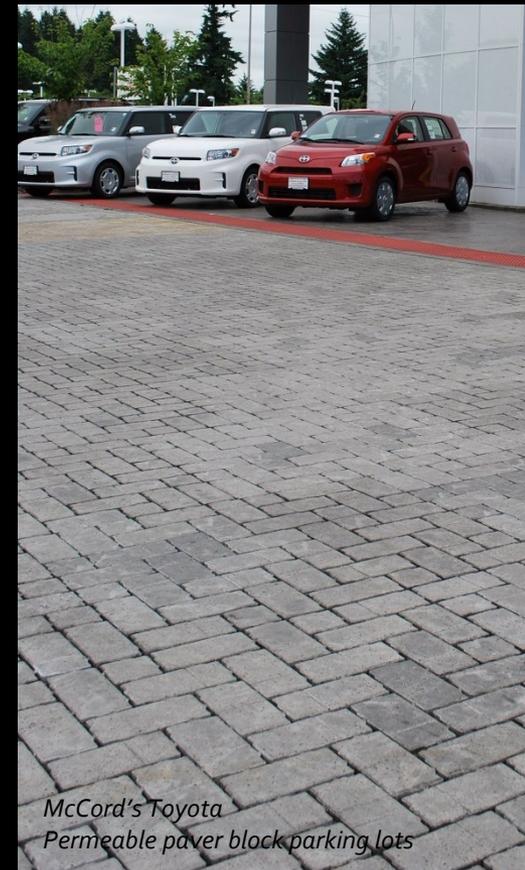


Updating our stormwater rules

Our task is to incorporate Ecology's "Minimum Requirements" for development projects into our code and design manual. Must be equivalent to Ecology's 2012 manual:

- Identify the same thresholds for projects
- Utilize the same Best Management Practices for treatment and stormwater control
- Meet the same Design Standards for the various facility types

Clark County Code 40.385 and the adopted design manual require applicants to meet the minimum requirements

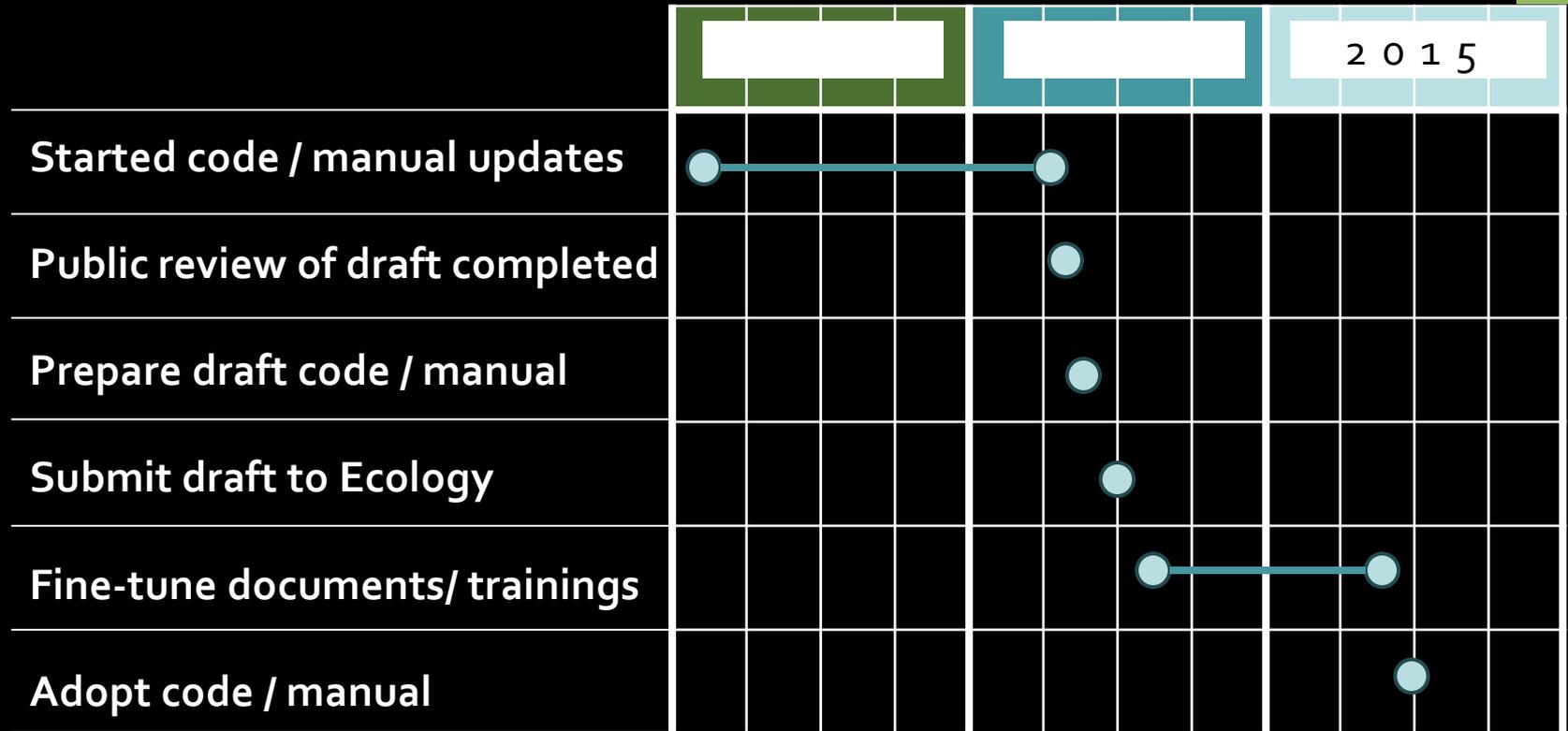


McCord's Toyota
Permeable paver block parking lots



Project schedule

Two phases of the project are preparing the Draft code/manual for Ecology review, and fine-tuning the Final for adoption...



Changes in the stormwater manual

- Minor changes to some of the requirements
- Biggest change is #5 – “On-site stormwater management”
- Low Impact Development (LID) practices are required where feasible to infiltrate, disperse and retain on site:

Choose from List

or

Performance standard

List 1: (mostly for smaller projects)

BMP #	BMP Name	Lawn and Landscape Areas	Roofs	Other Hard Surfaces
T5.30	Full Dispersion		1	1
T5.14A	Rain Garden		2	2
T5.15	Permeable Pavement			2
T5.10C	Perforated Stub-out Connections		4	
T5.11	Concentrated Flow Dispersion			3

Stormwater discharges shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year peak flow to 50% of the 2-year peak flow. (MR #7)



On-site stormwater management

- Small projects, such as a single-family residential, must choose from a list of BMPs in sequential order:

#1 – Soil quality / depth of landscaped areas



Remove compacted / poor soils



Compost

#2 – Roof runoff
Dispersion, infiltration



Downspout



Drywell

#3 – Other hard surfaces (driveways, patios)



Paver driveway



Paver patio



On-site stormwater management

- Large projects, such as commercial/industrial, may choose from a list but has different priorities:

List: Permeable pavement has to be used first and then rain gardens or other methods



Performance Standard: It is more flexible in which BMPs can be used, including traditional BMPS



How do we know what's feasible?

- **Ecology determines what's feasible**
 - “Yes” or “No” questions incorporated into the design manual
- **Applicants don't have to use particular BMPs if not feasible, e.g. permeable pavement not feasible in...**
 - high traffic areas
 - on 'fill' soils
 - on bridges
 - in high groundwater



High volume roads and bridges will not need to use permeable pavement

What if a site is not feasible for LID BMPs?

Still need to remove pollutants and control high runoff events with traditional BMPs.



Net result of new on-site requirements

- Adopts new requirements and practices for managing runoff on-site
- Disincentive for site clearing and adding new hard surfaces
 - Increases cost if applicants continue business as usual
 - Runoff treatment and flow control continue

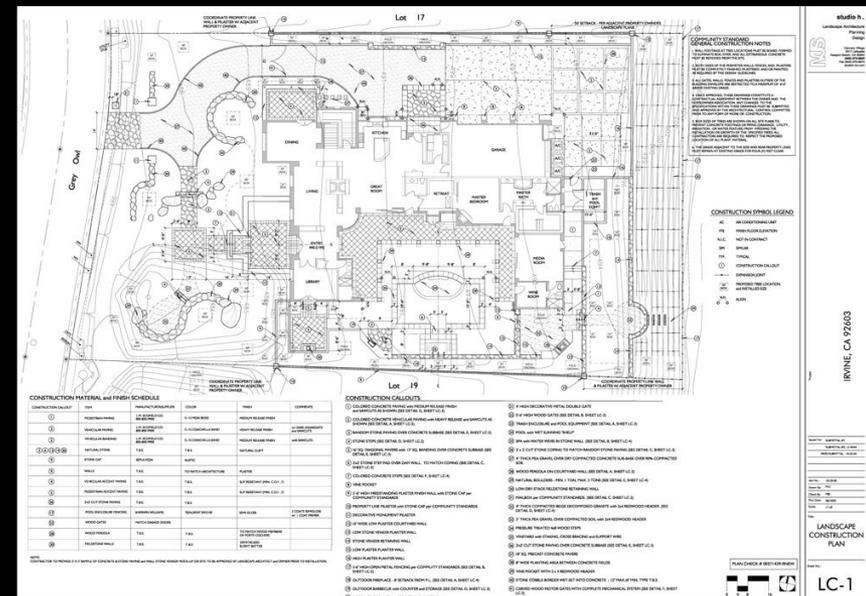
What is the effect of the Pollution Control Hearings Board ruling?

Changes to feasibility of permeable pavement limits the use (i.e. "very traffic low volumes")



How are current projects affected?

- Regarding current projects:
 - The county's permit specifies that the new requirements apply to all project applications submitted after July 1, 2015.
 - For projects that have already submitted applications or received a final engineering approval construction needs to start by July 1 2020



Public outreach summary to date...

- Advisory committees
 - Technical Advisory Committee (8 meetings)
 - Stakeholder Advisory Committee (5 meetings)
- Internal stakeholders
 - Three departments and multiple divisions have contributed
- Public review
 - Monthly e-newsletters
 - E-mail updates to stakeholders
 - Web page updates
 - Document review comment period (April 11 – May 5)

Clark County
NPDES Municipal Stormwater
Code and Design Manual Update Project — 2013-2015



March - April 2014

Newsletter Update Volume 7

Clark County is updating its municipal code and stormwater design manual to comply with Washington's NPDES Phase 1 Municipal Stormwater Permit. This newsletter series will give you the latest updates and progress on the project.



WHAT'S NEW

We want to hear from you!

Clark County has completed a "Review Draft" of the stormwater municipal code and the updated stormwater manual. We would like to hear from users, such as yourself, as to how these tools will assist your upcoming projects. Here is some key information to help guide you through the drafts.

- **Water Quality Code 13.26A** - Reducing and controlling the discharge of contaminants to stormwater runoff. Changes to this chapter are minimal, such as formatting, updating language and consistency.
- **Stormwater and Erosion Control Code 40.385** - This code is in place to apply stormwater requirements to development projects to "safeguard public health, safety and welfare." This chapter has been significantly reduced and most technical information has been moved to the updated Clark County Stormwater Manual.
- **Clark County Stormwater Manual** - The updated manual will now be a stand-alone Clark County specific document to meet all of your stormwater management needs, including:
 - Book 1 - Applicability, Submittals and BMP selection (Best Management Practices)
 - Book 2 - BMP Design
 - Book 3 - Pollution Source Control
 - Book 4 - Maintenance and Operations

Read through the materials, let us know if you have questions and feel free to visit any of the meetings to the right to hear more on this important work.

The public comment period is open!

We can accept comment forms from **April 11 - May 5, 2014** on the Review Draft of the stormwater code and manual. Visit www.clark.wa.gov/stormwater to find documents, comment forms and locations of printed copies of the materials for your review.

Important dates:

- **Technical Advisory Committee meeting #8**
Public Service Center, 1300 Franklin St.
• May 7th - 3-5 pm
- **Stakeholder Advisory Committee meeting #5**,
Elections, 1408 Franklin St.
• May 8th - 4-6 pm
- **Clean Water Commission**
Public Service Center, 6th Floor, 1300 Franklin St.
• May 7th, 6:30 - 8:30 pm
- **Public Comment Period** - Documents will be available for public review
• April 11 - May 5, 2014
- **BOCC Worksession**
• May 14, 11:15 am
- **Draft Submittal to Department of Ecology**
• June 2014

All meetings are open to the public

For other formats, contact the Clark County ADA Office: Voice (360) 397-2322; Relay 711 or (800) 833-4388; Fax (360) 397-6165; E-mail ADA@clark.wa.gov.

Next steps...

- **Finish the draft code/manual by mid-June**
- **Submit to Ecology by June 30, 2014 for equivalency review**
- **Refine process-related items, e.g. submittals, policies in second half of 2014**
- **Prepare final code/manual for Board adoption by March 2015**
- **Adopt code/manual effective June 30, 2015**

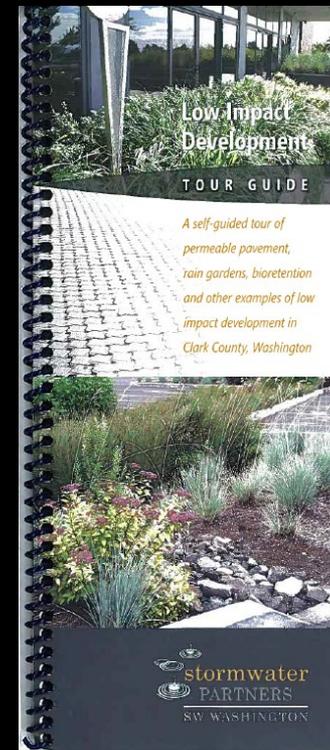


Need more information...

Department of Environmental Services
www.clark.wa.gov/stormwater

What you can do...

- Tour LID Sites in our community to learn more about what they look like and how they function....copies of the LID Tour Booklet available at PSC or visit www.stormwaterpartners.com/LID
- Participate in the process and let us know your thoughts
- Participate in our Green Neighbors and Green Business programs (lots of ideas and options) clarkgreenneighbors.org & clarkgreenbiz.com



Comments & questions?

